510(k) SUMMARY of the UF-500i

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.

The assigned 510(k) number is: <u>KOS3002</u>

1. Submitted by:

Sysmex America, Inc.

One Nelson C. White Parkway

Mundelein, IL 60060

Phone: (847) 996-4675; FAX: (847) 996-4655

Contact person: Nina Gamperling Date prepared: October 3, 2008

2. Name of Device:

Trade or proprietary name: Sysmex[®] UF-500i

Common name: Automated urine particle analyzer.

Classification name:

Urine Particle Counter (21 CFR 864.5200, Product Code LKM)

Related Items:

Sheath: UFII SHEATH (Product code: GIF)

Stain: UFII SEARCH -SED (Product code: GJH) Diluent: UFII PACK -SED (Product code: GIF)

Stain: UFII SEARCH -BAC (Product code: GJH)
Diluent: UFII PACK -BAC (Product code: GIF)
OC Material: UFII CONTROL (Product code: JIW)

Calibrator: UFII CALIBRATOR (Product code: JJW)

Option: Graph printer Bar code Reader

Rack Sampler Unit (UASU-3/UASU-4)

PU-17

3. Predicate Method:

Sysmex[®] UF-1000i (k#070910-Cleared May 25, 2007)

4. Device Description:

The Sysmex® UF-500*i*, an automated urine particle analyzer, is a dedicated system for the analysis of microscopic formed elements in urine specimens. The instrument consists of three principal units: (1) Main Unit which aspirates, dilutes, mixes and analyzes urine samples; (2) Auto Sampler Unit supplies samples to the Main Unit automatically; (3) IPU (Information Processing Unit) which processes data from the Main Unit and provides the operator interface with the system. The UF-500*i* is equipped with a Sampler that provides continuous automated sampling for up to 60 tubes.

The instrument utilizes Sysmex flow cytometry using a red semiconductor laser for analyzing organized elements of urine. Particle characterization and identification is based on detection of forward scatter, fluorescence and adaptive cluster analysis. Using its own reagents, the UF-500*i* automatically classifies organized elements of urine and carries out all processes automatically from aspiration of the sample to outputting the results.

Analysis results and graphics are displayed on the IPU screen. They can be printed on any of the available printers or transmitted to a Host

	computer.
5. Intended Use:	The Sysmex® UF-500 <i>i</i> is an automated urine particle analyzer for <i>in vitro</i> diagnostic use in screening patient populations found in clinical laboratories. The UF-500 <i>i</i> analyzes the following parameters in urine samples: RBC, WBC, Epithelial Cells, Cast, and Bacteria and flags the presence of the following: Pathologic Cast, Crystal, Sperm, Small Round Cell, Yeast like cell and Mucus.
6. Substantial equivalence-	Method and flagging comparison studies along with reference interval comparison to the UF-1000 <i>i</i> were performed and there is no difference
Similarities and Differences:	between the UF-1000i and the UF-500i.
7. Conclusion	The UF-500 <i>i</i> demonstrates substantial equivalence to the predicate device, the UF-1000 <i>i</i> .



Food and Drug Administration 2098 Gaither Road Rockville MD 20850

Sysmex America, Inc. c/o Ms. Nina Gamperling Director Clinical Affairs One Nelson C. White Parkway Mundelein, IL 60060

FFR - 3 2009

Re: k083002

Trade/Device Name: Sysmex® UF-500i Automated Urine Particle Analyzer

Regulation Number: 21 CFR 864.5200 Regulation Name: Automated Cell Counter

Regulatory Class: Class II Product Code: LKM Dated: January 05, 2009 Received: January 06, 2009

Dear Ms. Gamperling:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Maria M. Chan, Ph.D.

Acting Division Director

Division of Immunology and Hematology Devices Office of In Vitro Diagnostic Device Evaluation and Safety

Center for Devices and Radiological Health

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Enclosure

Indications for Use

510(k) Number (if known): K083002

Device Name: Sysmex® UF-500i, Automated Urine Particle Analyzer

Indications For Use: The Sysmex® UF-500*i* is an automated urine particle analyzer for *in vitro* diagnostic use in screening patient populations found in clinical laboratories. The UF-500*i* analyzes the following parameters in urine samples: RBC, WBC, Epithelial Cells, Cast, and Bacteria and flags the presence of the following: Pathologic Cast, Crystal, Sperm, Small Round Cell, Yeast like cell and Mucus.

Prescription Use X AND/OR Over-The-Counter Use
(Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C) (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE) Office of In Vitro Diagnostic Device Evaluation and Safety

Special 510(k) UF-500i, Automated Urine Particle Analyzer

510(k) K083082

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